Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Objectives: The WHO recommends rotavirus vaccination worldwide, an intervention that has been shown to significantly avoid morbidity and health care resource utilization due to rotavirus. While most of the burden occurs in young children, rotavirus vaccination has also been shown to have herd immunity effects and decrease rotavirus incidence in the entire population. However, despite a positive recommendation by the Health Council in 2021, a universal vaccination program has yet to be implemented in the Netherlands. Therefore, we sought to understand the public health impact of rotavirus vaccination in terms of total number of cases averted, and averted cases that sought out- and inpatient care. ***Methods:*** We used a dynamic transmission model with maternal immunity with 43 progression compartments, further stratified into 40 age groups, and fitted it to national surveillance data on acute gastroenteritis. We calculated the impact of a vaccination program by estimating the infections, outpatient cases, and hospitalizations averted by universal rotavirus vaccination for those aged ≤5 and the entire population. The model was parameterized using the latest clinical published evidence regarding efficacy, and vaccination coverage was assumed to be similar to other pediatric vaccines (88%). Finally, we calculated averted outcomes over fifteen years following the rotavirus vaccine introduction. ***Results:*** Over fifteen years following universal rotavirus vaccination, we estimate that 745,083 (95.2% of total) cases, 89,528 (95.1% of total) outpatient cases, and 17,322 (95.1% of total) hospitalizations would be averted in the population ≤ 5. Among the entire population, these numbers would correspond to 909,557 (95.1% of total) cases, 90,829 (95.1% of total) outpatient cases, and 16,493 (95.1% of total) hospitalizations. ***Conclusions:*** Results are in line with real-world post-licensure impact studies of rotavirus vaccination in high-income countries. Universal rotavirus vaccination is an impactful intervention and should be considered when evaluating ways to decrease health care burden to rotavirus gastroenteritis.

EPH13
MODELLING THE IMPACT ON LUNG CANCER LIFE YEARS OF UNIVERSAL SCREENING FOR LUNG CANCER AMONGST DEFINED HIGH-RISK POPULATIONS IN GREECE

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Objectives: Lung cancer is the most common type of cancer diagnosed in Greece, accounting for 13.9% of total new cancer cases and, by far, the biggest cancer-related killer (23.1% of deaths) (Globocan, 2020). Despite this high epidemiological burden, the country does not implement a national lung cancer screening strategy. This study estimates the impact on lung cancer life years (LCLYs) of a hypothetical scenario, where 100% of high-risk population, as defined by the US Preventive Services Taskforce (2021), i.e., aged 50-80, firsthand (20 pack-years) or ex-smokers (quit within the past 15 years) are screened and linked to care (SLTC) for lung cancer versus the current scenario of opportunistic screening in Greece. ***Methods:*** A stochastic model was built to monitor a hypothetical cohort of 100,000 high-risk men and women as they transitioned between health states (without cancer, with cancer, alive, dead) over 5 years. Transition probabilities were based on clinical expert opinion. Expected outcomes (cancer cases, cancer-related deaths and LCLYs lost) were modelled in both current and hypothetical scenarios. The difference in outcomes between the two scenarios was calculated. 150 iterations of simulation scenarios were conducted for 100,000 persons each and means and standard deviation (SD) calculated. ***Results:*** Over 5 years, the hypothetical scenario leads to fewer deaths (-24.56%, $p<0.001$) and less life years lost (-31.01%, $p<0.001$). It also leads to a shift to lower-stage cancers at the time of diagnosis – this allows for more frequent eligibility for curative treatment. Our findings, derived from a stochastic model based on clinical expert opinion, are in line with the recently published outcomes of the NELSON clinical trial (de Koning et al, 2020). ***Conclusions:*** Our study suggests that applying a 100% screening strategy amongst high-risk adults aged 50-80, would result in additional averted deaths and LCLYs gained over 5-years in Greece.

EPH14
PREVALENCE OF DEPRESSION IN JAPAN AND THE US POPULATIONS BEFORE AND DURING THE COVID-19 PANDEMIC: A RETROSPECTIVE OBSERVATIONAL STUDY USING REAL-WORLD DATA

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Objectives: The COVID-19 pandemic has been declared by WHO since March 2020. Thousands of mental-health-related-surveys and -reviews have been reported globally since then. However, to our knowledge, there is no real world database analytic study on the prevalence of major depressive disorder (MDD) on during the COVID-19 outbreak. We aim to evaluate the prevalence of MDD among US and Japan populations during vs before the COVID-19 pandemic using claims data in both countries. ***Methods:*** IQVIA Claims database which integrates payer claims data from the health insurance union for Japanese workers, and the IQVIA PharMetrics® Plus data which captures fully adjudicated medical and pharmacy claims data from national and sub-national health plans and self-insured employer groups in the US were used. Cohort was identified as patients with MDD diagnosis (ICD-10: F32, F33) between October 2018 and September 2021. Cohort1 (Pre-COVID-19): cohort who received first anti-depressive treatment between April 2019 and September 2019. Cohort2 (during COVID-19): cohort who received first anti-depressive treatment between April 2020 and September 2020. Analysis was performed using IQVIA Evidence 360, a Software-as-a-Service Platform containing global real world datasets. ***Results:*** In Japan, the overall prevalence of MDD were 2.0% in cohort1 and 2.3% in cohort2, where MDD patients below the ages of 20 were 3.7% and 4.8%, respectively. In the US, the overall prevalence of MDD were 5.0% in both cohorts, where MDD patients below the ages of 20 were 8.6% and 9.9%, respectively. The duration of medical treatment had no significant changes in the 2 cohorts in both countries. ***Conclusions:*** The prevalence of MDD was slightly increased during COVID-19 compared to pre-COVID-19 in Japan whereas there was no change in the US. Among these, children and teenagers tend to have higher prevalence of depression during the COVID-19 outbreak in both countries. Further details will be presented in the conference.

EPH15
EPIDEMIOLOGY OF PATIENTS REVASCULARIZED FOR PERIPHERAL ARTERY DISEASE IN FRANCE (2016-19): A RETROSPECTIVE OBSERVATIONAL COHORT STUDY USING THE FRENCH HOSPITAL DISCHARGE DATABASE (PMSI)

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Objectives: There is a lack of up-to-date epidemiological data regarding patients with lower extremity peripheral artery disease (PAD) who underwent lower-limb revascularization in France. The objectives of the study were to quantify the number of patients with PAD who annually undergo lower-limb revascularization in France, and to assess the onset of atherothrombotic events (AE) in this population. ***Methods:*** Using the French Hospital Discharge Database (PMSI), patients hospitalized for revascularization for PAD (index date) were followed from January 1, 2016 to December 31, 2019. AE (a composite of: acute limb ischemia, major amputation for vascular cause, myocardial infarction, ischemic stroke/TIA, and in-hospital death) as well as comorbidities were identified using ICD-10 codes, medical procedure code, or medication dispensing and the cumulative incidence of AE was assessed. ***Results:*** During the 4-year study period, a total of 191,758 patients underwent revascularization for PAD and were included in the study. From 55,151 to 58,493 patients underwent revascularization for PAD each year. Patients had a mean age of 72 ± 12.2 years at index date, and were mainly men (69.3%). The three most frequent comorbidities were diabetes mellitus (35.7%), chronic coronary disease (30.3%), and renal failure (15.8%). Cumulative incidence of the first AE at 12, 24 and 36 months were 33.8%, 43.2% and 50.1%. The three most frequent events that occurred were ALI (26.3%), all-cause in-hospital death (19.1%), and major amputation for vascular causes (11.0%). Secondary revascularization occurred in 32.4% of patients. ***Conclusions:*** This study provides a comprehensive and contemporary overview of patients treated by revascularization for PAD in our country in the recent years. Adjusted comparative results will allow to compare these occurrences between the different events of interest.

EPH16
ANTIDIABETIC DRUGS AND THE INCIDENCE OF PARKINSON'S DISEASE IN PATIENTS WITH TYPE 2 DIABETES: A CASE-CONTROL STUDY

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Objectives: Several studies have suggested that antidiabetic drugs could be effective in preventing the development of Parkinson's disease (PD). However, there are no consistent reports on the prevention of PD according to the type of antidiabetic medication. In this study we aimed to investigate the effect of the antidiabetic drug on the development of PD. ***Methods:*** We conducted a nationwide case-control study using the Korean Health Insurance Review and Assessment database. Elderly patients (aged ≥ 60years) who had been diagnosed with type 2 diabetes mellitus between January 1, 2009, and December 31, 2017, were recruited in this study. A 1-year lag time was applied for minimize the reverse causal relationship of PD. The association between the use of antidiabetic